CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. 6-00-82
NPDES PERMIT NO. CAG616001
WDID NO. 6A099110003

WASTE DISCHARGE REQUIREMENTS

FOR

THE CITY OF SOUTH LAKE TAHOE, EL DORADO COUNTY, AND PLACER COUNTY
STORM WATER/URBAN RUNOFF DISCHARGE

Findings of the California Regional Water Quality Control Board, Lahontan Region (Regional Board):

1. Permittee

The City of South Lake Tahoe (City), El Dorado County, and Placer County discharge storm water/urban runoff to surface and ground waters of the Lake Tahoe Hydrologic Unit (LTHU). These discharges occur within various hydrologic subareas (watersheds) throughout the LTHU. For the purposes of this permit, the City, El Dorado County, and Placer County have joined together as Co-Permittees for coverage under a NPDES permit for storm water discharges and are collectively referred to as the "Permittees," and the area within the LTHU and within the City, El Dorado County, and Placer County is referred to as the "Project Area." The City is responsible for coordinating the submittal of annual permit fees. See Attachment "A" for definitions of terms used in this permit. Storm water/urban runoff includes those discharges from residential, commercial, industrial, and construction areas within the project area and excludes discharges from federal lands or other jurisdictions including state lands.

2. Project Area Description

a. Each Permittee has jurisdiction over maintenance responsibilities for its respective boundaries and is entirely responsible for the implementation of the appropriate storm water program as required by this Order. Each Permittee need only comply with the requirements of this Order applicable to discharges originating from its jurisdictional boundaries and/or from the portion of the boundaries it owns or operates. The Permittees shall be responsible for storm water/urban runoff discharges within the legal jurisdictional boundaries of their respective City and Counties. The City of South Lake Tahoe shall be responsible for storm water/urban runoff within the legal boundaries of the City of South Lake Tahoe, within the LTHU. El Dorado County shall be responsible for storm water/urban runoff within the legal boundaries of El Dorado County, within the LTHU. Placer

County shall be responsible for storm water/urban runoff within the legal boundaries of Placer County, within the LTHU.

b. Federal, State, or regional entities within the Permittees' boundaries, not currently named in this Order, may operate storm drain facilities and/or discharge storm water to the storm drains and watercourses covered by this Order. The Permittees may lack legal jurisdiction over these entities under the state and federal constitutions. Consequently, the Regional Board recognizes that the Permittees should not be held responsible for such facilities and/or discharges.

c. Continuing Regional Board regulation of new and existing storm water treatment and control facilities within each local jurisdiction will assist the Permittees in achieving compliance with this permit. However, the Permittees are responsible for meeting permit conditions and effluent limitations at locations which discharge storm waters to surface and ground waters from their respective municipal storm systems within the LTHU. The Regional Board has the discretion and authority to require that other entities within the Project Area obtain individual storm water discharge permits pursuant to 40 Code of Federal Regulations (CFR) 122.26(a).

d. In cases where storm water/urban runoff quality is impacted by discharges from lands not owned by the Permittees, the Permittees may petition the Regional Board to take appropriate action to control such discharges. Any such petition shall include the information specified in Provision II.C.4 of this permit.

e. Discharges of storm water/urban runoff from lands owned by the California Department of Transportation (Caltrans) are currently regulated under a separate NPDES permit. Caltrans is required to comply with specific effluent limitations prior to discharging from their right-of-way into storm water collection systems operated by the Permittees.

f. The United States Department of Agriculture, Forest Service, Lake Tahoe Basin Management Unit (LTBMU) is responsible for the protection and multiple-use management of National Forest System lands and resources, within the Lake Tahoe Basin for the benefit of the people of the United States. The LTBMU Land and Resource Management Plan incorporates the provisions of *Volume IV of the Water Quality Management Plan for the Lake Tahoe Region* (208 Plan). Section 313 of the Federal CWA, 33 U.S. Code Section 1323, mandates federal agency compliance with all federal, state, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution in the same manner and to the same extent as any non-governmental entity. Discharges from lands owned by the LTBMU are required to comply with

specific effluent limitations and receiving water objectives contained in the *Water Quality Control Plan for the Lahontan Region* (Basin Plan) prior to discharging from their property into storm water collection systems operated by the Permittees.

3. Permit Objectives

The objectives of this Order are:

a. to rescind expired Board Order No. 6-92-02 which regulated storm water/urban runoff within the LTHU, and Board Orders which previously regulated City and County properties and projects that will be regulated with the issuance of this NPDES permit including Board Order Nos. 6-87-058 for the City of South Lake Tahoe (Senior Citizen Center, Recreation Center, City Maintenance Yard, El Dorado County Public Library, Campground, and Other Facilities), 6-87-065 for the City of South Lake Tahoe (Road Improvement Projects), 6-87-068 for Placer County Department of Public Works (Road Improvement Projects), 6-87-069 for El Dorado County Department of Public Works (Road Improvement Projects), and 6-89-011 for El Dorado County Department of Transportation (Maintenance Yard, Tahoe Paradise).

b. to regulate the discharge of pollutants in storm water/urban runoff discharges to surface and ground waters of the LTHU;

c. to implement waste discharge requirements for typical maintenance, reconstruction, and/or modification at City- or County-owned maintenance yards, facilities, or roads; and

d. to implement regulatory requirements prescribed in the Basin Plan and provisions of the 208 Plan, requirements of Section 402(p) of the Federal CWA, and 40 CFR Part 122.

4. Review Procedures for Maintenance/Reconstruction/Modification Projects

Typical maintenance projects involving less than half an acre of soil disturbance, may be conducted by the Permittees without review by the Regional Board. These projects include typical maintenance, reconstruction, and/or modification at City- or County-owned maintenance yards, facilities, or roads including seal coats (slurry, chip, fog, and sand), thin A/C blankets and patches, grading existing shoulders, cleaning ditches, cleaning and repairing drainage facilities, filling potholes, sealing cracks, repairing guardrail and fence, deicing roadway, sanding, minor slide removal, landscape maintenance including tree trimming and removal, signing and striping, roadway

sweeping, slipout removal and repair, snow removal, weed control, bridge maintenance and repair on the deck or railing, spot base repair, and deicing sand reclamation.

The following types of reconstruction, improvement and modification projects proposed by the Permittees shall require submittal of plans and description for review by the Executive Officer:

a. Projects involving demolition or soil disturbance of greater than or equal to half an acre and less than one acre, except for grading of existing shoulder widths and deicing sand reclamation;

b. Projects not described under Finding 4. (paragraph 1) of these requirements, including culvert repairs or installation and bridge repair below the deck;

c. Projects within waterways, 100-year floodplains, or SEZs.

If these projects are determined to exceed the restrictions of this permit, a complete report of waste discharge including a filing fee shall be submitted for review. These projects may be covered by existing general permits for construction activities in the Lake Tahoe Basin.

5. Permit History

Board Order No. 6-92-02, a NPDES permit regulated the discharge of storm water /urban runoff by the Permittees and required the Permittees to develop and implement long-term (20-year) storm water/erosion control programs within their respective Project Area. Previous Board Orders 6-84-74, 6-84-75, and 6-84-76, established Waste Discharge Requirements (WDRs) for storm water/urban runoff discharges within the LTHU from specific facilities or maintenance projects within the City of South Lake Tahoe, El Dorado County, and Placer County.

6. Permittee Compliance

The Permittees have taken significant actions to comply with the basic intent of Board Order 6-92-02, which is to meet water quality objectives through the completion of storm water/erosion control projects within the Project Area. Currently, regional runoff objectives (constituent levels for Nitrogen, Phosphorus, Iron, Turbidity, and Grease and Oil) specified in the Water Quality Control Plan for the Lahontan Region are often exceeded in discharges of storm water/urban runoff from the Project Area.

7. Lahontan Regional Plan

The Board adopted a *Water Quality Control Plan for the Lahontan Region* (Basin Plan) on March, 31, 1995 which incorporates the previous *Lake Tahoe Basin Water Quality Plan*. This permit implements the Basin Plan.

8. Beneficial Uses - Surface Water

The State Water Resources Control Board (SWRCB) designated Lake Tahoe as an Outstanding National Resource Water (ONRW) in the *Lake Tahoe Basin Water Quality Plan* (LTBWQP) on October 29, 1980. This designation incorporates Section 303(c) of the Federal CWA, and 40 CFR 131.12(b)(3) which states that "changes in water quality should not impact existing uses or alter the essential character or special use that makes the water an ONRW." The water quality of waters which are designated an ONRW must be maintained and protected. No permanent or long-term reduction in water quality is allowable in areas given special protection as ONRWs (48 Fed. Reg. 51402). Section 114 of the Federal CWA also indicates the need to "preserve the fragile ecology of Lake Tahoe."

Storm water discharges from the Project Area affect surface waters of LTHU. The beneficial uses of Lake Tahoe and its tributaries, as set forth and defined in the Basin Plan, include:

a. municipal and domestic supply;
b. agricultural supply;
c. ground water recharge;
d. water contact recreation;
e. non-contact water recreation;
f. cold freshwater habitat;
g. wildlife habitat;
h. rare, threatened or endangered species;
i. freshwater replenishment;
j. navigation;
k. commercial and sportfishing;
l. preservation of biological habitats of special significance;
m. migration of aquatic organisms;
n. spawning, reproduction, and development;
o. water quality enhancement; and
p. flood peak attenuation / flood water storage.

9. Beneficial Uses - Ground Water

Storm water discharge from the Project Area affect ground waters of LTHU. The beneficial uses of ground water in the LTHU as set forth and defined in the Basin Plan are:

a. municipal and domestic supply;
b. agricultural supply.

10. Clean Water Act Effluent Limitations

Effluent limitations and toxic effluent standards established pursuant to Sections 208(b), 301, 302, 303(d), 304, 306, 307, and 403 of the Federal CWA, as amended, are applicable to the discharge of storm water/urban runoff from the Project Area.

11. NPDES Storm Water Regulations

a. Federal regulations for storm water/urban runoff were promulgated by the United States Environmental Protection Agency (EPA) on November 19, 1990 (40 CFR, Parts 122, 123, and 124) and apply to the discharge regulated by this permit.

b. Pursuant to Section 402 of the Federal CWA and Section 13370 of the California Water Code, the EPA approved the California State Program to issue and enforce NPDES permits for discharges to surface waters of the State. Section 405 of the Water Quality Act of 1987 added Section 402(p) to the Federal CWA to establish regulations for storm water/urban runoff discharge under the NPDES program.

c. Section 402(p) of the Federal CWA requires the issuance of NPDES permits for storm water discharges for which the EPA Regional Administrator or the Regional Board, as the case may be, determines that the storm water discharge contributes to a violation of a water quality standard, or is a significant contributor of pollutants to waters of the United States.

d. Section 402(p) of the Federal CWA requires NPDES permits for municipal storm water systems to include a requirement to effectively prohibit non-storm water discharges into municipal storm water collection systems, and controls to reduce the discharge of these pollutants to the maximum extent practicable. Maximum extent practicable means to the maximum extent possible, taking into account equitable considerations of synergistic, additive, and competing factors, including but not limited to, gravity of the problem, fiscal feasibility, public health risks, societal concerns, and social benefits. The requirement in the Federal CWA to reduce pollutants to the “maximum extent practicable” provides a minimum level

of water quality protection. The state has the discretion to require strict compliance with state water quality standards, through numerical limitations and otherwise. As it relates to the Lake Tahoe Hydrologic Unit, the State of California has adopted more stringent requirements in the Region's Basin Plan, including prohibitions and numeric effluent limitations. The Basin Plan contains prohibitions against waste including earthern materials and other additional materials to surface waters of the Lake Tahoe Basin watershed. The Basin Plan also contains effluent limits and runoff objectives for these types of discharges. These requirements are in effect and contained in this Permit.

e. The California Toxics Rule (CTR) was promulgated on May 18, 2000 (Federal Register Vol. 65, No. 97). This permit incorporates specific water quality standards required by the CTR (Attachment "F" and Attachment "G").

The CTR establishes ambient water quality criteria for priority toxic pollutants in the State of California. These numeric criteria allow the State and EPA to evaluate the adequacy of existing and potential control measures to protect aquatic ecosystems and human health in order to determine what actions are appropriate to ensure that storm water discharges are brought into compliance with numeric criteria of the CTR.

The CTR allows the Regional Boards discretion to require monitoring for priority pollutants. For the purposes of this permit, monitoring shall be conducted at two locations for each Permittee including the Permittee's individual maintenance yards, and an additional site. The additional site should be divided among the Permitees to include an industrial site, a commercial site, and a residential site. Selection of these sites shall be based on the Permittees' best judgement, and monitoring shall be conducted during the worst case scenario (first-flush event) in order to capture the full range of pollutants in the sampling procedure. This monitoring shall be conducted annually at each site for five years. CTR priority pollutants shall be monitored to serve as an initial indicator for the presence of any CTR priority pollutants. A reduced number of priority pollutants will be required to be monitored based on the results of a two-year study found in the United States Geological Survey report "Concentrations and Distribution of Manmade Organic Compounds in the Lake Tahoe Basin, Nevada and California, 1997-99." Priority pollutants detected in this study shall be monitored by the Permittees at each of the two chosen sample sites. Priority pollutants not detected in the USGS study are not required to be monitored. The monitoring results will assist the Regional Board and the Permittees to 1) evaluate source reduction of toxic pollutants for industrial and all other inputs, 2) develop management plans where necessary, and 3) implement source control and best management practices to reduce the discharge of these pollutants to the maximum extent practicable.

Receiving water limitations for the CTR constituents (Attachment "F" and Attachment "G") are based on zero dilution capacity of the receiving water. The receiving water limitations for the CTR constituents may be revised if it is determined that alternative limitations are more appropriate. The Regional Board is requiring analyses of storm water runoff (effluent) to determine if any CTR constituents are present or in concentrations that could result in violations in the receiving waters. The Regional Board Executive Officer may require sampling of the receiving water following review of storm water runoff monitoring results.

12. Lake Tahoe Impairment

The SWRCB's Water Quality Assessment classifies Lake Tahoe as an impaired water body, partly due to water quality degradation resulting from storm water discharges from urbanized areas. Lake Tahoe is listed as an impaired water body pursuant to CWA Section 303(d), 304(l), and 319 lists. The Basin Plan identifies storm water discharges as a primary source of pollution to Lake Tahoe.

13. NPDES Permit

This Order shall serve as an NPDES permit pursuant to Section 02 of the Federal CWA, or amendments thereto, and shall take effect upon adoption by the Regional Board provided the EPA Regional Administrator has no objections.

14. Lake Tahoe Basin Storm Water/Erosion Control Projects

a. The Permittees are currently participating in a Capital Improvements Program (CIP) for storm water/erosion control projects as required by the 208 Plan. The purpose of the CIP is to identify projects, an implementation program, and a funding mechanism for the control of erosion and storm water/urban runoff in the Tahoe region. The goal of the CIP is to implement Best Management Practices (BMPs) and to complete storm water/erosion control projects to achieve compliance with this permit by the year 2008. The Tahoe Regional Planning Agency (TRPA) will consider updating the CIP with projects identified in the Environmental Improvement Program (EIP) and TRPA's proposed Finance Plan for the EIP. This permit requires the Permittees to treat storm water runoff, and the Regional Board recognizes that restoration projects are not required by this permit; however, projects of this type may be listed under the EIP.

b. The Permittees provided updated five-year and long-term lists of potential storm water/erosion control projects dated July, 1999, that are shown in Attachment "B", which is made a part of this Order. Completion of storm water/erosion control projects, such as those that occur on the five-year list and in the EIP, is

necessary to control erosion and storm water/urban runoff and will aid in attaining compliance with water quality objectives.

c. TRPA's land use and water quality plans (208 Plan) require phasing of new development based upon progress implementing remedial erosion and drainage control projects and restoring Stream Environment Zones (SEZs). As outlined in the 208 Plan, TRPA's strategy for ensuring funding for remedial projects includes: additional research on the concept of user fees; work with state and local transportation departments to ensure high priority for LTHU projects; encouragement of local assessment districts; possible adjustment of the TRPA mitigation fees; and pursuit of state and federal grants. TRPA sets aside at least 5% and as much as 25% of its water quality mitigation funds for implementation of SEZ restoration projects. The Basin Plan recognizes TRPA's priorities for remedial projects and discusses similar potential funding sources.

d. In addition to targeting and completing storm water/erosion control projects, water quality improvements can be achieved through the adoption and enforcement of local ordinances by the Permittees and other entities (rather than the Regional Board) that require the implementation of BMPs for all new construction throughout the Project Area.

15. Best Management Practices Retrofit

Best Management Practices (BMPs) as described in TRPA's 208 Plan, are necessary to control erosion and storm water/urban runoff, and will aid in the attainment of water quality objectives for surface and ground waters of the State of California. BMPs outlined in the 208 Plan include, but are not limited to, revegetation of disturbed land, stabilization of eroding stream banks with rocks, installation of retaining walls and other structures, and construction and maintenance of structures for the treatment of storm water/urban runoff from impervious surfaces. BMPs may not be fully effective in preventing water quality problems, and do not necessarily ensure compliance with water quality objectives; however, the implementation of BMPs will aid in attaining compliance with water quality objectives.

TRPA ordinances require all public and private land owners to implement BMPs for erosion and runoff control for new development and for proposed modifications to existing development (retrofit) within the LTHU. Additionally, TRPA ordinances require implementation of BMPs to existing development pursuant to the BMP retrofit program. The program's implementation schedule follows a priority system based on priority watersheds whereby property owners not subject to a prior retrofit permit or a federal storm water discharge permit are required to install BMPs on or before October 15 in years 2000, 2006, and 2011. TRPA also requires discharge permits for property owners

with the following uses: commercial, recreation, and public service. Under the 208 Plan, the Regional Board may issue waste discharge requirements to Permittees of storm water permits to ensure the implementation of BMPs. The Regional Board currently reviews new development and requires BMPs in accordance with the Memorandum of Understanding (MOU) between TRPA and the Regional Board. The Regional Board may require BMPs where existing development occurs to prevent or correct problems. Under MOUs between TRPA and the Permittees or local agency land development guidelines, the Permittees require BMPs for new development within their individual jurisdictions.

16. CEQA Compliance

The issuance of an NPDES permit for this discharge is exempt from the provisions of the California Environmental Quality Act (CEQA), Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code, in accordance with Water Code Section 13389.

17. Antidegradation

The Regional Board has considered state and federal antidegradation requirements pursuant to 40 CFR 131.12 and SWRCB Resolution No. 68-16. This permit does not allow degradation of surface waters of the State of California.

18. Notification of Interested Parties

The Regional Board has notified the Permittees and other interested agencies and persons of its intent to issue a NPDES permit for discharges of storm water/urban runoff from the Project Area.

19. Public Comments

The Regional Board, in public meetings held on April 13, 2000, and October 12, 2000, heard and considered all comments pertaining to this permit. The Regional Board reserves the privilege to reopen this permit upon legal notice to, and after opportunity to be heard, is given to all concerned parties.

IT IS HEREBY ORDERED that the Permittees, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal CWA and amendments, regulations, and guidelines adopted thereunder, shall comply with the following:

I. DISCHARGE SPECIFICATIONS

A. Effluent Limitations

1. All storm water/urban runoff flows generated within the Project Area which are discharged to publicly owned or maintained land treatment or infiltration systems, or to surface waters shall not contain constituents in excess of the following limits:

		Maximum Concentration for Discharge to:	
Constituent	Units*	Land Treatment/ Infiltration Systems	Surface Waters
Total Nitrogen	mg/L as N	5.0	0.5
Total Phosphorous	mg/L as P	1.0	0.1
Total Iron	mg/L	4.0	0.5
Turbidity	NTU	200	20.0
Grease and Oil	mg/L	40	2.0

*mg/L milligrams of substance per liter of storm water
*NTU nephelometric turbidity units

2. If constituent concentrations of runoff entering the Project Area exceed the numerical standards specified above, there shall be no increase in the constituent concentrations in the storm water/urban runoff flows that are discharged from the Project Area.

3. All storm water/urban runoff generated within the Project Area that are discharged to surface waters shall not contain the following:

   a. substances in concentrations that are toxic to, or that produce detrimental physiological responses to human, plant, or animal life; and
   b. coliform organisms attributable to human and livestock wastes.

B. Receiving Water Limitations

1. The discharge of storm water/urban runoff flows generated within the Project Area to surface waters shall not raise the constituent levels above chemical water quality objectives, cited in Attachment "C."

2. The discharge of storm water/urban runoff flows generated within the Project Area to surface or ground waters shall not cause a violation of the following water quality objectives for waters of the LTHU:

   a. Color - Waters shall be free of coloration that causes a nuisance or adversely affects the water for beneficial uses. The natural color of fish, shellfish or the surface water resources used for human consumption shall not be impaired.

   b. Tastes and Odors - Waters shall not contain taste or odor producing substances in concentrations that impart undesirable tastes or odors to fish, shellfish or other inland surface water resources used for human consumption, or cause nuisance or adversely affect the water for beneficial uses.

   c. Floating Material - Waters shall not contain floating material, including solids, liquids, foams and scum, in concentrations that cause a nuisance or adversely affect the water for beneficial uses.

   d. Suspended Materials - Waters shall not contain suspended material in concentrations that cause a nuisance or adversely affect the water for beneficial uses.

   e. Settleable Material - Waters shall not contain substances in concentrations that result in the deposition of material that cause nuisance or adversely affect the water for beneficial uses. The concentration of settleable material in surface waters shall not be raised by more than 0.1 milliliter per liter (ml/l).

   f. Oil and Grease - Waters shall not contain oils, greases, waxes or other materials that result in a visible film or coating on the surface of the water or on objects in the water that cause nuisance or that otherwise adversely affect the water for beneficial uses.

   g. Biostimulatory Substances - Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect the water for beneficial uses.

h. Sediment - The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

i. Turbidity - Waters shall be free of changes in turbidity that cause a nuisance or adversely affect the water for beneficial uses. Increases in Turbidity shall not exceed background levels by more than 10 percent.

j. pH - The pH shall not be depressed below 7.0 nor raised above 8.4. Changes in normal ambient pH levels shall not exceed 0.5 units.

k. Dissolved Oxygen - The dissolved oxygen concentrations in terms of percent saturation, shall not be depressed by more than 10 percent, nor shall the minimum dissolved oxygen concentration at any time be less than 80 percent of saturation or less than 7.0 milligrams per liter whichever is more restrictive.

l. Bacteria - Surface waters shall not contain concentrations of coliform organisms attributable to human wastes. Also, the fecal coliform concentration based on a minimum of five samples for any 30-day period, shall not exceed a log mean of 20/100 ml, nor shall more than 10 percent total samples during any 30-day period exceed 40/100 ml. The median concentration of coliform organisms, in ground waters, over any seven-day period shall be less than 2.2/100 ml.

m. Temperature - The natural receiving water temperature shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such an alteration in temperature does not create a nuisance, or adversely affect the water for beneficial uses. The temperature of waters with beneficial use designation of cold waters shall not be raised above natural levels.

n. Toxicity - All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration. The survival of aquatic life in surface waters subjected to a waste discharge shall not be less than that for the same water body in areas unaffected by the waste discharge or,

when necessary, for other control water that is consistent with the requirements for "experimental water" as described in the American Public Health Association's *Standard Methods for the Examination of Water and Wastewater*, latest edition.

o. Pesticides - The summation of concentrations of total identifiable chlorinated hydrocarbons, organophosphates, carbonates, and other pesticide and herbicide groups, in any water of the LTHU, shall not exceed the lowest detectable levels, using the most recent detection procedures available. There shall be no increase in pesticide concentrations found in sediments or aquatic life.

p. Chemical Constituents - Ground waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Chapter 15, Article 4, Section 64435, Tables 2 and 4, or in amounts that adversely affect the water for agricultural beneficial uses.

q. Un-ionized Ammonia - The concentrations of un-ionized ammonia (NH_3) or total ammonium ($NH_3 + NH_4$) at ambient water temperature and pH in receiving waters, shall not exceed the corresponding water quality objectives given in Attachment E, which is made part of this permit.

r. Storm water/urban runoff discharges from the project area to surface waters shall not cause the concentrations of constituents in surface waters to be in excess of the receiving water limits listed in Attachment "F" and Attachment "G."

C. General Requirements and Prohibitions

1. The discharge or threatened discharge, attributable to new development in SEZs or which is not in accordance with land capability, of solid or liquid waste, including soil, silt, sand, clay, or other organic or earthen material, to surface waters in the LTHU is prohibited unless the Regional Board or Executive Officer grants an exception in accordance with the Basin Plan.

2. The discharge of treated or untreated domestic wastewater, industrial waste, garbage or other solid wastes, or any deleterious material to surface waters of the LTHU is prohibited.

3. The discharge or threatened discharge, attributable to human activities, of solid or liquid waste materials including soil, silt, clay sand, and other organic and earthen materials to surface waters, or to lands below the highwater rim (Elevation 6229.1 ft. Lake Tahoe Datum) of Lake Tahoe, or within the 100-year floodplain of any tributary to Lake Tahoe is prohibited unless the Regional Board or Executive Officer grants an exception in accordance with the Basin Plan.

4. The discharge of oil, gasoline, diesel fuel, or any other petroleum derivative or any toxic chemical or hazardous waste is prohibited.

5. Storm water/urban runoff collection, treatment, and/or infiltration disposal facilities shall be designed, installed, and maintained for a discharge of storm water runoff from a 20-year, 1-hour design storm (approximately 1" of rainfall) from all impervious surfaces. If site conditions do not allow for adequate on-site disposal, all site runoff must be treated to meet the Effluent Limitations and the Receiving Water Limitations. The Executive Officer may approve alternative storm water treatment measures.

6. Storm water runoff generated by the Permittees in excess of the design storm shall only be discharged to a storm drain or stabilized drainage.

7. Storm water/urban runoff collection, transport, treatment, storage, and disposal facilities shall at all times be operated as efficiently as possible and maintained in good working order to ensure compliance with this Order.

8. All storm water/urban runoff from the Project Area shall be controlled so as to not cause downstream erosion.

9. Storm water/urban runoff discharges from the Project Area shall not threaten or cause a pollution or nuisance, as defined in Section 13050 of the California Water Code.

Best Management Practices (BMPs) are defined in 40 CFR 122.2 as “schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.” For purposes of this Board Order, BMPs

may include non-structural (e.g. public education, regulatory powers, urban planning, etc.) and structural (e.g. detention basins, grass swales, runoff infiltration devices, etc.) controls.

1. Prior to any disturbance of existing soil conditions, the Permittees shall utilize appropriate management practices and/or install temporary erosion control facilities to prevent the transport of eroded earthen materials and other wastes off the property.

2. Unless a variance has been granted pursuant to the provisions of this Order, there shall be neither removal of vegetation, nor disturbance of existing ground surface conditions between October 15 of any year and May 1 of the following year, except:

   a. in emergency situations where the public health or welfare is threatened; or
   b. for existing (improved) road shoulder when there is neither snow on the ground nor an immediate threat of precipitation;

3. Measures shall be taken to minimize or avoid vehicle use in unimproved areas adjacent to construction and maintenance activity sites, regardless of condition, unless previously approved by the Executive Officer for staging, site access, construction activities, or maintenance.

4. There shall be no significant modification of existing drainage ways, culverts, earthen ditches, or existing stream channel geometry except for the purpose of stabilization or enhancement of water quality improvement effects. All modifications of the bed, channel, or bank of a stream require a prior written agreement with the California Department of Fish and Game.

5. All soil disturbance activities shall cease and temporary erosion control measures shall be immediately installed if adverse weather conditions threaten the transport of disturbed soils from the project site.

6. All disturbed soils shall be adequately stabilized or revegetated. Revegetated areas shall be maintained until vegetation becomes established and self-perpetuating.

7. Prior to October 15 of each year, the Permittees shall provide permanent or temporary (if a project is incomplete) stabilization of all disturbed or

eroding areas through commencement of revegetation and/or completion of mechanical stabilization measures. Commencement of revegetation shall consist of seeding, planting, mulching, initial fertilization as needed, and initial watering as needed.

8. Road abrasives (sand, cinders) shall be removed from the paved rights-of-way and drop inlets or sand-oil separators as soon as practicable and disposed of appropriately.

9. All disturbed soils and surplus waste earthen materials shall be removed from the project site and deposited only at a legal point of disposal, or restabilized on-site in accordance with erosion control plans previously approved by the Executive Officer.

10. At no time shall waste earthen materials be placed in surface water drainage courses, or in such a manner as to allow the discharge of such materials to adjacent undisturbed land or to any surface water drainage course.

11. Fresh concrete or grout shall not be allowed to contact or enter surface waters. Diversion facilities shall be installed and maintained as necessary to prevent surface waters of the LTHU from contacting concrete that has not set for at least 24 hours or soil disturbed by maintenance, reconstruction and/or modification projects.

12. The Permittees shall immediately clean up any spilled petroleum products and shall immediately transport the petroleum products or contaminated materials to a legal disposal site.

13. Abrasives used for cold weather safety may need to be washed and graded so that silt, clay, and organic content is minimized.

14. Grading of road shoulders and earthen drainage ditches shall not be more frequent or extensive than necessary for road safety maintenance and shall not be performed in the presence of flowing or standing water.

15. Snow removal equipment shall be used in a way that minimizes damage to roadside vegetation whenever practicable.

16. Whenever feasible, topsoil and organic matter (pine needles, woody debris, etc.) shall be saved from project sites and used for revegetation.

17. Immediately upon completion of any improvement, reconstruction and/or modification project, all disturbed areas shall be compacted or otherwise stabilized to preclude transport of soils.

18. Installation of diversion facilities shall consist of clean materials having exterior surfaces free of soil, silt, sand, or clay. If sand bags are employed, they must be filled with clean materials free of silt, clay, and organic substances. Use of burlap sandbags is discouraged.

19. If excessive leakage occurs through and/or beneath any diversion facilities when dewatering is attempted, soil or concrete may be placed to form a secondary barrier, provided that flows bypassing the initial diversion facilities do not contact these substances and that they are completely removed prior to removal or relocation of the initial diversion facilities.

20. All dewatering pumpage having one or more constituent levels in excess of those listed in the Receiving Water Limitations above shall be discharged in such a manner that it will not re-enter any wetland or other surface water in a surface flow. The Permittees shall obtain a separate NPDES permit for dewatering discharges to surface waters.

21. Travel of equipment in waters not enclosed by diversion facilities shall be minimal. All equipment surfaces which might contact flowing waters outside of diversion facilities shall be cleaned free of petroleum products and earthen materials.

22. If construction of a temporary rock pad or stream crossing is necessary to prevent erosion due to equipment travel in a surface water or is required for false-work installation, such rock shall be free of soil, silt, sand, clay, and organic materials. After completion of work, rock comprising the pad shall be removed to the maximum practicable extent in such a manner that erosion does not occur. Rock remaining in the watercourse shall not significantly alter normal flow patterns.

II. PROVISIONS

A. Explanatory Provisions

1. The requirements prescribed herein do not authorize commission of any act causing injury to the property of another, nor protect the Permittee from liability under federal, state, or local laws, nor guarantee the Permittee a capacity right in the receiving waters.

2. The Permittees shall comply with the Standard Provisions if applicable (dated November 12, 1991) in Attachment "D" of this permit.

3. In cases where storm water/urban runoff quality is impacted by discharges from lands not owned, operated, or maintained by the Permittees, a Permittee may petition the Regional Board to regulate the discharge. Such petition shall include:

   a. a written description of the discharge, and any documentation of water quality problems caused by the discharge;

   b. an $8^1/_2$" x 11" location map which delineates the problem area;

   c. documentation that the Permittee does not have jurisdiction over the discharge and/or is unable to require compliance.

   Such petitions may be submitted by the Permittees at any time.

B. Monitoring and Reporting

1. Pursuant to Section 13267 of the California Water Code, the Permittees shall comply with Monitoring and Reporting Program No. 6-00-82 and with the "General Monitoring and Reporting Provisions."

C. Administrative Provisions

1. Board Order Nos. 6-92-02, 6-87-058, 6-87-065, 6-87-068, 6-87-069, and 6-89-011 are hereby rescinded.

2. For all areas within a Permittee's jurisdiction, the Permittee (s) shall comply with effluent limitations I.A.1. and I.A.2. by **November 30, 2008**, except for projects subject to the Regional Board construction permits (NPDES or waste discharge requirements). All discharges authorized by this Order shall be consistent with the terms and conditions of this Order. The discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by this Order shall constitute a violation of the terms and conditions of this Order.

3. These requirements do not exempt the Permittees from compliance with any other laws, regulations, or ordinances which may be applicable, they do not legalize land treatment and disposal facilities and they leave

unaffected any further restraints on those facilities which may be contained in other statutes or required by other regulatory agencies.

4. This permit shall become the NPDES permit pursuant to Section 402 of the Federal CWA, as amended from time to time, upon adoption by the Regional Board provided no objections from the U.S. EPA Regional Administrator have been received. If the Regional Administrator objects to the issuance, the permit shall not become effective until such objection is withdrawn.

5. Caltrans is conducting a survey of quarries in the vicinity of the Lake Tahoe Basin to identify sources of road abrasive material with the lowest phosphorous and fine particle size composition. The Regional Board reserves the right to re-open this permit to incorporate the results of this survey to set performance objectives related to road abrasive use in the Lake Tahoe Basin.

D. **Required Submittals and Compliance Time Schedules**

The following submittals are required in accordance with Section 13267 of the California Water Code.

1. The Permittees shall notify the Regional Board as soon as practicable by telephone whenever an adverse condition occurs as a result of the discharge; written confirmation shall follow within one week. An adverse condition includes, but is not limited to, serious violation or serious threatened violation of the terms and conditions of this Order, significant spills of petroleum products or toxic chemicals, or serious damage to control facilities that could affect compliance.

2. Not later than **December 1, 2000**, and annually thereafter, the Permittees shall submit an updated version of the list of planned storm water/erosion control projects in Attachment "B." The updated list will not include projects completed prior to **October, 1999** and will serve as the Permittee's updated list of potential storm water/erosion control projects targeted for completion by 2008. The updated list shall contain the next year's plan for project construction and at a minimum an updated five-year project list. Restoration projects on this list are not required by this permit as storm water/erosion control projects.

3. Not later than **December 1, 2002**, the Permittees shall submit a report of the results for the monitoring project required by the first NPDES permit

(Board Order No. 6-92-02). This includes monitoring and reporting of the Ski Run Boulevard sediment basins for the City of South Lake Tahoe, the Apache Erosion Control Project sediment cans for El Dorado County (submitted in spring 1997), and the Tahoe City sediment pond and wetland for Placer County.

4. Not later than **December 1, 2000**, the Permittees shall submit a proposed Storm water/Urban Runoff Monitoring Program Plan, including monitoring to comply with the California Toxics Rule and an implementation schedule, for Executive Officer review and approval. This Plan shall be developed in accordance with the requirements in Monitoring and Reporting Program No. 6-00-82 (I.D. and I.E.).

5. **This Order expires on October 12, 2005 and the Permittees must file a report of waste discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for issuance of a new NPDES permit by April 12, 2004.**

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on October 12, 2000.

_____

HAROLD J. SINGER
EXECUTIVE OFFICER

Attachments:
A. Definitions
B. Potential Storm Water/Erosion Control Projects
C. Water Quality Objectives
D. Standard Provisions
E. U.S. EPA Ammonia Criteria For Freshwater
F. Numeric Criteria for Priority Toxic Pollutants
G. Minimum Levels for Major Chemical Groupings

DP/sht:municipal.npdes.wdr

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

MONITORING AND REPORTING PROGRAM NO. 6-00-82

FOR

CITY OF SOUTH LAKE TAHOE, EL DORADO COUNTY, AND PLACER COUNTY STORM WATER/URBAN RUNOFF DISCHARGE

I. MONITORING PROGRAM REQUIREMENTS

A. Inspection of Roadways and Right-of-Ways and Other Properties

An inspection of publicly improved right-of-ways and publicly owned facilities within the Lake Tahoe Hydrologic Unit (LTHU) within the Permittee's jurisdiction shall be made by the individual Permittees once each year. The purpose of these investigations is to identify areas where existing or potential erosion and surface runoff problems occur in the Project Area so that corrective measures may be undertaken. The inspection for erosion problems and control facilities shall include, as applicable:

1. Infiltration Trenches

   a. clogging of inlets by debris
   b. accumulation of sediment
   c. disrepair of trenches
   d. free runoff movement into infiltration facilities
   e. damage by vehicles

2. Drop Inlets and Gutters

   a. clogging by debris, ice, sediment
   b. runoff movement into infiltration facilities or retention facilities
   c. damage by vehicles or snow plow equipment

3. Drainage Collection System

   a. significant accumulations of, or clogging by debris, ice, or sediment
   b. restricted movement of water through pipes, channels, and appurtenances
   c. damage to curbs, gutters, or retention facilities
   d. areas of localized flooding (frequent/recurring)

4. Erosion Control

   a. unhealthy and non-productive vegetation
   b. gully or rill erosion on slopes
   c. sediment buildup at toe of slopes and road shoulders
   d. vegetation damage by vehicles or heavy foot traffic
   e. bare areas in need of revegetation or mechanical stabilization

5. Maintenance Yards

   a. accumulated debris (pine needles, refuse, etc.) on parking areas and roof tops
   b. illicitly dumped wastes
   c. parking and traffic area restrictions in place.

6. Where earthen materials are used at road shoulders, in ditches, or on road embankments to replace those materials lost as a result of erosion, the Permittees shall record the following:

   a. source of the replacement materials
   b. location
   c. amount of materials imported (cubic yards)
   d. type of replacement material including, at least, percent volatile organic solids and particle size distribution (refer to B.1.c. below)
   e. measures taken to prevent further loss of materials at the location.

B. Snow and Ice Control

1. Goals

   a. Improve application efficiency, to reduce quantities applied where possible.

   b. Recover materials and prevent their discharge to surface waters to the maximum extent practicable.

   c. Reduce the amount of total phosphorous and fines (particle size) in abrasives applied in the LTHU.

2. Where abrasives or ice control agents are used on roadways within the LTHU, the following shall be recorded:

   a. Location of the source for the material.

   b. Types and chemistry of abrasives or ice control agents.

      (1) Ice control agents shall be analyzed for: total phosphorous, total nitrogen, iron and percent NaCl. Abrasives shall be analyzed for: volatile solids, iron, total nitrogen, total phosphorous, and total reactive phosphorous.

c. Gradation and percent organic matter of abrasives. Gradation and percent organic matter shall be determined from composite samples. The composite samples shall be taken from one stockpile that represents all deliveries from the originating source. Composite samples shall be taken from each new originating source. If the source remains the same each year, composite samples are only required to be conducted initially.

d. Quantity of ice control agents and abrasives used within each jurisdiction.

e. Quantity of material recovered from the roadways.

C. Tahoe Basin Erosion Control /Storm Water Treatment Projects

1. Erosion control/storm water treatment projects shall continue to be monitored visually for effectiveness. Photographs shall continue to be taken to demonstrate and document each erosion control project. Photograph stations shall be chosen by the Permittees on a project-by-project basis. The number and location of stations shall be sufficient to demonstrate improvements made. For each erosion control project, documentary photographs shall be taken at the following times:

   a. Pre-project, to document the erosion problems.

   b. Spring, following the completion of the project, to document the improvements made and initial success of soil stabilization measures.

   c. Two years or more after the project completion, to document long-term success of stabilization measures.

D. California Toxics Rule

1. The California Toxics Rule (CTR) promulgates criteria for priority toxic pollutants in the state of California for inland surface waters and enclosed bays and estuaries (See Attachments "F" and "G" to the permit for a list of constituents and minimum detection limits). The Permittees must submit a Monitoring Plan to measure CTR constituents in storm water runoff by **December 1, 2000**.

2. For the purposes of this Monitoring Plan, monitoring shall be conducted at two locations for each Permittee including the Permittee's individual maintenance yards, and an additional site. The additional site should be divided among the Permitees to include an industrial site, a commercial site, and a residential site. Selection of these sites shall be based on the Permittees' best judgement, and monitoring shall be conducted during the worst case scenario (first-flush event) in order to capture the full range of pollutants in the sampling procedure. This

monitoring shall be conducted annually at each site for five years. CTR priority pollutants shall be monitored to serve as an initial indicator for the presence of any CTR priority pollutants. A reduced number of priority pollutants will be required to be monitored based on the recent United States Geological Survey report "Concentrations and Distribution of Manmade Organic Compounds in the Lake Tahoe Basin, Nevada and California, 1997-99." Priority pollutants detected in this study shall be monitored by the Permittees at each of the two chosen sample sites. Priority pollutants not detected in the USGS study are not required to be monitored. The monitoring results will assist the Regional Board and the Permittees to 1) evaluate source reduction of toxic pollutants for industrial and all other inputs, 2) develop management plans where necessary, and 3) implement source control and best management practices to reduce the discharge of these pollutants to the maximum extent practicable.

3. The Plan shall contain sampling locations, a description of land uses and relative areas of disturbance above the sample locations (impervious vs. undisturbed land uses, etc.), a sampling strategy to ensure capture of the first-flush event, and the laboratory to be used for processing samples.

E. Special Monitoring Projects

1. Previous monitoring requirements for each Permittee (municipality) required submittal of monitoring results from a designated monitoring project or site. The City of South Lake Tahoe committed to monitor and report on the Ski Run Retention Ponds and their effectiveness. El Dorado County was committed to monitor and report on the Apache Erosion Control Project sediment-can effectiveness. Placer County was committed to monitor and report on the Tahoe City retention pond and wetland and their effectiveness. To date, only El Dorado County has complied with this requirement. Placer County and the City of South Lake Tahoe shall submit a final monitoring report on these projects by **December 1, 2002**.

2. With the renewal of this NPDES permit, each municipality is required to propose an additional monitoring project within the LTHU by **December 1, 2000**. The results of this monitoring project shall be submitted no later than **December 1, 2003**.

3. The Monitoring Program Plan shall be designed and implemented to meet the following objectives:

   a. to aid in the development and implementation of storm water pollution prevention programs; and

b. to comply with Section 402(p) of the Federal Clean Water Act; and 40 CFR Part 122.

c. to track the Permittees compliance with effluent limitations and receiving water objectives. This may include the evaluation of specific storm water/erosion control projects, best management practices, evaluation of existing snow and ice control practices, and other storm water management controls. The Regional Board prefers that evaluations be conducted on the following BMPs: those not previously studied (in the Lake Tahoe Basin), those comprising new technology, or those which make contributions to the existing state-of-knowledge of a specific BMP.

4. The Monitoring Program Plan shall be submitted to the Lake Tahoe Interagency Monitoring Program (LTIMP).

5. The Monitoring Program Plan shall contain rationale for selection of monitoring method, pollutant parameters, sample type, sample location, representativeness of samples, and frequency of monitoring. The Plan must document program effectiveness in achieving the objectives listed above. The Plan must include a quality assurance/quality control program.

6. Monitoring activities shall include the following elements as appropriate to meet program objectives:

a. Standard observations including observations of floating and suspended materials, discoloration, turbidity, and odor;

b. the collection of quantitative pollutant data;

c. flow measurements or estimates of flow rate, and the total amount of discharge; and

d. photographs.

II. REPORTING

A. Inspection/Maintenance Report

Annual inspections of the Project Area should include a report documenting the following: identification and description of erosion or surface runoff problems including location, measures taken to correct them (if any), and proposed future repairs. This information shall submitted no later than **December 1, 2000 and annually thereafter**.

B. Snow and Ice Control

Not later than **December 1, 2000**, and annually thereafter, the Permittees shall submit a report to the Regional Board describing current snow removal practices for City and County roads in the LTHU. All information recorded pursuant to this Monitoring Program shall be reported (see Item I.B.2.).

C. Erosion Control Projects

Not later than **December 1, 2000**, and annually thereafter, the Permittees shall submit a report which includes:

a. a detailed summary of storm water/erosion control projects completed in the previous calendar year,

b. a detailed description of each of the storm water/erosion control projects targeted for completion in the next year, and

c. a detailed description of each of the storm water/erosion control projects targeted for completion in the next five years, if necessary.

D. California Toxics Rule

Not later than **December 1, 2001**, and annually thereafter, the Permittees shall submit a report which includes a detailed summary of storm water monitoring conducted for priority pollutants.

E. Training of Employees in Erosion Control Practices

The Permittees shall continue to submit, no later than **December 1, 2000**, on an annual basis, a statement certifying that their personnel including but not limited to road crew and resident engineers, have been instructed on the implementation of Best Management Practices within the LTHU.

F. Hazardous Waste Emergency Plan

The Permittees shall submit an emergency plan for roadways within their individual jurisdiction in the LTHU for containing and cleaning up hazardous waste spills to prevent them from reaching surface or ground waters. Submit updates as necessary on an annual basis.

G. Schedule

1. The annual monitoring report must be submitted to the Regional Board on **December 1** of each year. The Permittees shall organize the information in a complete and concise form for quick review by the Board. Monitoring reports shall also include the following information:

   a. Name and telephone number of an individual who can answer questions about the report.

   b. The Monitoring and Reporting Program No. 6-00-82.

   c. The WDID number (6A099110003).

2. Not later than **December 1, 2000**, the Permittees must submit a proposed Storm water/Urban Runoff Monitoring Program Plan, including implementation schedule, for Executive Officer review and approval. This plan is to be implemented upon receiving the Regional Board Executive Officer's approval.

3. Not later than **December 1, 2000**, the Permittees must submit a Monitoring Plan for the CTR (see I.D. above).

H. Provisions

1. The Permittees shall calibrate and perform maintenance procedures in accordance with manufacturer's specifications on all monitoring instruments and equipment to ensure accurate measurements. The Permittees shall retain records of all monitoring information, including: all calibration and maintenance records; all original strip chart recordings for continuous monitoring instrumentation; and copies of all reports required by this permit for a period of at least five years from the date of the sample, measurement or report. This period may be extended by request of the Board at any time. All monitoring instruments and devices used by the Permittees to fulfill the approved Monitoring Program shall be properly maintained and calibrated as necessary, at least annually to ensure their continued accuracy.

2. All monitoring shall be conducted by qualified personnel. The Permittees shall submit to the Regional Board a list of those persons implementing the monitoring program and a description of their qualifications, training and experience.

3. Records of monitoring information shall include:

   a. date, exact location, and time of observations, sampling, or measurements;

b. names and titles of individual(s) who performed the observation, sampling, or measurements;

c. date(s) analyses were performed;

d. time(s) analyses were initiated;

e. weather conditions at the time of observation or sampling (precipitation, wind, rain runoff or snowmelt).

f. name and title of individual(s) who performed the analyses;

g. analytical techniques or methods used;

h. results of such analyses; and

i. quality assurance/quality control results.

4. Chemical analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services or a laboratory approved by the Regional Board Executive Officer.

5. Permittees shall comply with the "General Provisions for Monitoring and Reporting" dated September 1, 1994, which is attached to and made a part of this Monitoring and Reporting Program.

_____ October 12, 2000
HAROLD J. SINGER DATE
EXECUTIVE OFFICER

Attachment: General Provisions for Monitoring and Reporting

DP/shT:municipal.npdes.m&r.doc

Attachment "A"

DEFINITIONS

First-flush	refers to the delivery of a disproportionately large load of pollutants during the early portion of a storm event due to the rapid runoff of accumulated pollutants on surfaces during dry periods.
Ground waters	include, but are not limited to, all subsurface waters being above atmospheric pressure and the capillary fringe of these waters.
Municipal Storm Sewer Collection System	means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, including special districts under State law such as a sewer district or drainage district, flood control district or Indian tribe or an authorized Indian tribal organization or a designated and approved management agency under Section 208 of the Clean Water Act that discharges to waters of the United Sates; (ii) designed or used for collecting or conveying storm water; (iii) which is not a combined sewer; and (iv) which is not part of a Publicly Owned Treatment Works as defined at 40 CFR 122.2.
Nuisance	means anything which: (1) is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property, and (2) affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal, and (3) occurs during or as a result of the treatment or disposal of wastes.
Point Source	any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.
Storm water	means storm water runoff, snow melt runoff, and surface runoff and drainage.
Surface waters	include, but are not limited to wetlands, lakes, and streams, either perennial or ephemeral, and other waters that flow in natural or artificial impoundments. "Surface waters" does not include conveyences or impoundments used exclusively for storm water disposal.

DP/shT:attcha.def.doc

POTENTIAL STORM WATER/EROSION CONTROL PROJECTS
FOR THE CITY OF SOUTH LAKE TAHOE,
EL DORADO COUNTY AND PLACER COUNTY
(Listed July 1999)

CITY OF SOUTH LAKE TAHOE

Planned Projects 1995-2000

Wildwood (B/W ski Run & Pine Grove Park)
Improve Drainage Channel Beecher/Lodi ECP
Al Tahoe/Pioneer Trail/Bijou Creek Extensions ECP
East Sierra Tract ECP
El Dorado Ave. ECP
Lake Tahoe Airport ECP and SEZ Restoration Project
Trout Creek Watershed Enhancement Project
Regina Rd. ECP
Pioneer Trail at Ski Run Blvd.
Rocky Point ECP
Bijou ECP
Bijou Pines ECP
East Pioneer Trail ECP
East Y ECP
15th St. ECP
Lodi/Brockway ECP
North 89 ECP
North Sierra ECP
North Y ECP
Pioneer Trail/Walkup to Needle Peak ECP
Sierra Blvd. ECP
Ski Run Blvd. ECP
South 89 ECP
Stateline North ECP
Tahoe Island Park #4 ECP
Tahoe Keys Blvd. ECP
Tahoe Vista ECP
10th St. ECP/8th and Glorene
Upper Cold Creek ECP/Globin Ponds
West Y ECP
Al Tahoe Subdivision ECP
Lake Tahoe Airport ECP Phase II
Lake Tahoe Airport General Aviation Wash and Maintenance
Industrial Tract Project
Bijou Community Center

Planned Projects 2000-2001

Herbert Ave. SEZ Restoration
Trout Creek Community Plan SEZ Restoration
Lake Tahoe Airport ECP and SEZ Restoration
Truckee River Marsh Restoration

Planned Projects 2002-2002
Trout Creek Meeks Site SEZ Restoration
Upper Truckee Airport SEZ Restoration

Planned Projects 2002-2003
Charlesworth Ct. SEZ Restoration
Trout Creek SEZ Restoration, Phase 2

Planned Projects 2003-2004
Citywide SEZ restoration

Planned Projects 2004-2005
Lily Ave. SEZ Fill Revegetation

Planned Projects 2005-2006
Trout Creek SEZ Restoration, Phase 3
Bijou Area Water Quality Project

Planned Projects 2006-2007
Pioneer Village ECP

Planned Projects 2007-2008
Bijou Fairway and Meadow Restoration

Previous Projects
1993
South Ave./Winnemucca Cul-de-Sac ECP
Ski Run Water Quality Improvement Facility, Phase I ECP
Motor Pool Sand-Oil Interceptor/1700 D Street

1994
El Dorado Beach Bike Trail Landscape Project
Lake Tahoe Airport Underground Storage Tanks, Removal Project
Saddle Rd/Sterling Ct. Drainage and ECP
Al Tahoe/Pioneer5 Trail ECP
Lake Christopher/Cold Creek ECP and Stream Restoration
1995
Bijou/Wildwood Revegetation Project
STAGE Bus Garage BMP
Tahoe Valley ECP
Lakeview Avenue Drainage and ECP
1996
STAGE Maintenance Facility Expansion Project
Aviation Fuel Farm/Continuation of UST Removal Project
12/13th Streets ECP
Clement Ave. ECP
1997
Ski Run SEZ Restoration II
Ski Run Water Quality Improvement Facilities/Interim Project

Stateline ECP

EL DORADO COUNTY
Planned Projects between 1999-2010
Cascade ECP
Pioneer Trail III ECP
Silvertip ECP
Angora Creek SEZ Restoration Project
Sawmill Bike Path Project
15th Street Bike Trail Project
Woodland/Tamarack/Lonely Gulch ECP
Apalachee ECP
Christmas Valley ECP
Angora ECP Phase IV
North Upper Truckee III ECP
Montgomery Estates ECP
CSA #5 ECP
Angora Highlands ECP
Boulder Mountain ECP
Grass Lake Road ECP
Angora ECP Phase V
Sawmill ECP Phase I
Sawmill ECP Phase II
Sawmill ECP Phase III
Iriquois ECP

Previous Projects
1996
Angora ECP Phase 1
Martin Ave. at Trout Creek Culvert Replacement
Black Bart Phase 2
Black Bart Phase 3
Arapahoe Bike Trail
1997
Angora ECP Phase II
North Upper Truckee Rd. at Osgood Creek Slope Stabilization
Arapahoe Bike Trail Repairs and Revegetation
1998
Hekpa ECP
Pat Lowe Bike Trail Basin Modifications
Began Angora Monitoring

PLACER COUNTY
Planned Projects
1999
Agate Road Erosion Control Project Phase III
Tahoe City Urban Improvement Project, Phase 2

Burton Creek BMP Retrofit Program

2000
Beaver Street ECP
Fern Street ECP
National Avenue ECP
Nile Road ECP
Snow Creek Wetland Restoration Project
Tahoe City Urban Improvement Project, Phase 2
Timberland ECP

2001
Lake Tahoe Park ECP
Tahoe City Urban Improvement Project, Phase 2

2002
Upper National Avenue SEZ Restoration Project
Kings Beach Urban Improvement Project, Phase I

2003
Kings Beach Urban Improvement Project, Phase I
Kings Beach Urban Improvement Project, Phase II
Lake Forest ECP

Other Projects
Utility Undergrounding
Public Health and Safety Facilities

Previous ECP Projects
1995
Agate Road ECP Phase 1
1996
Chambers Lodge ECP
Kings Beach ECP
Tahoe Swiss Village ECP
1997
Agate Road ECP Phase 2
Tahoe Park Heights ECP No. 92617
1998
Homewood Canyon ECP

Attachment "C"

CHEMICAL WATER QUALITY OBJECTIVES FOR SURFACE WATERS OF THE NORTH LAHONTAN BASIN

Surface Water	Objective (mg/L) [1,2] TFR	Cl	SO_4	B	TN	TP	Total Iron
Lake Tahoe	60	3.0	1.0	0.01	0.15	0.008	-
	65	4.0	2.0	-	-	-	-
Fallen Leaf Lake	50	0.30	1.3	0.01	0.20	0.005	-
	-	0.50	1.4	0.02	-	0.01	-
Griff Creek	80	0.40	-	-	0.19	0.010	0.03
	-	-	-	-	-	-	-
Carnelian Bay Cr.	80	0.40	-	-	0.19	0.015	0.03
	-	-	-	-	-	-	-
Watson Creek	80	0.35	-	-	0.22	0.015	0.04
	-	-	-	-	-	-	-
Dollar Creek	80	0.30	-	-	0.16	0.030	0.03
	-	-	-	-	-	-	-
Burton Creek	90	0.30	-	-	0.16	0.015	0.03
	-	-	-	-	-	-	-
Ward Creek	70	0.30	1.4	-	0.15	0.020	0.03
	85	0.50	2.8	-	-	-	-
Blackwood Creek	70	0.30	-	-	0.19	0.015	0.03
	90	-	-	-	-	-	-
Madden Creek	60	0.10	-	-	0.18	0.015	0.015
	-	0.20	-	-	-	-	-
McKinney Creek	55	0.40	-	-	0.19	0.015	0.03
	-	0.50	-	-	-	-	-
General Creek	50	1.0	0.4	-	0.15	0.015	0.03
	90	1.5	0.5	-	-	-	-
Meeks Creek	45	0.40	-	-	0.23	0.010	0.07
	-	-	-	-	-	-	-
Lonely Gulch Cr.	45	0.30	-	-	0.19	0.015	0.03
	-	-	-	-	-	-	-

CHEMICAL WATER QUALITY OBJECTIVES FOR SURFACE WATERS OF THE NORTH LAHONTAN BASIN (continued)

Surface Water	Objective (mg/L) [1,2] TFR	Cl	SO_4	B	TN	TP	Total Iron
Eagle Creek	35	0.30	-	-	0.20	0.010	0.03
	-	-	-	-	-	-	-
Cascade Creek	30	0.40	-	-	0.21	0.005	0.01
	-	-	-	-	-	-	-
Tallac Creek	60	0.40	-	-	0.19	0.015	0.03
	-	-	-	-	-	-	-
Taylor Creek	35	0.40	-	-	0.17	0.010	0.02
	-	0.50	-	-	-	-	-
Upper Truckee R.	55	4.0	1.0	-	0.19	0.015	0.03
	75	5.5	2.0	-	-	-	-
Trout Creek	50	0.15	-	-	0.19	0.015	0.03
	60	0.20	-	-	-	-	-

[1]Annual Average Value/90th Percentile Value
[2]Objectives are as mg/L and are defined as follows:

B	Boron
Cl	Chloride
SO_4	Sulfate
Fe	Iron, Total
N	Nitrogen, Total
P	Phosphorous, Total
TDS	Total Dissolved Solids (Total Filterable Residues)

DP/T:attchc.wq.doc

STANDARD PROVISIONS FOR NPDES PERMITS

1. The Discharger (or Permittee) must comply with all of the terms, requirements, and conditions of this permit. Any violation of this permit constitutes violation of the Act, its regulations and the California Water Code, and is grounds or enforcement action, permit termination, permit revocation, and reissuance, denial of an application for permit reissuance; or a combination thereof.

2. The Discharger (or Permittee) shall comply with effluent standards or prohibitions established under 307(a) of the Clean Water Act (CWA) for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement. [40 CFR 122.41(a)(l)]

   The California Water Code provides that any person who violates a waste discharge requirement (same as permit condition), or a provision of the California Water Code, is subject to civil penalties of up to $1,000 per day or $10,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day or $20 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.*

   Violations of any of the provisions of the NPDES program, or of any of the provisions of this permit, may subject the violator to any of the penalties described herein, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.*

3. The Clean Water Act (CWA) provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, or 308 of the CWA is subject to a civil penalty not to exceed $10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing these sections of the CWA is subject to a fine of not less than $2,500, nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both. [40 CFR 122.41(a)(2)]

4. If the Discharger (or Permittee) wishes to continue an activity regulated by this permit after the expiration date of this permit, the Discharger (or Permittee) must apply for and obtain a new permit. [40 CFR 122.41(b)]

5. It shall not be a defense for a Discharger (or Permittee) in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [40 CFR 122.41(c)]

6. The Discharger (or Permittee) shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting health or the environment. [40 CFR 122.41(d)]

STANDARD PROVISIONS FOR NPDES PERMITS (continued)

7. The Discharger (or Permittee) shall, at all times, properly operate and maintain all the facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger (or Permittee) to achieve compliance with this permit. Proper operation and maintenance includes adequate laboratory controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities, or similar systems that are installed by a Discharger (or Permittee) only when necessary to achieve compliance with the conditions of this permit. [40 CFR 122.41(e)]

8. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger (or Permittee) for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 122.62]

9. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 122.41(f)]

10. The Discharger (or Permittee) shall furnish, within a reasonable time, any information the Board or EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The Discharger (or Permittee) shall also furnish to the Board, upon request, copies of records required to be kept by this permit. [40 CFR 122.41(h)]

11. The Board, EPA, and other authorized representatives shall be allowed:

    (a) Entry upon premises where a regulated facility (or project area) or activity is located or conducted, or where records are kept under the conditions of this permit;

    (b) Access to copy any records that are kept under the conditions of this permit;

    (c) To inspect any facility (or project area), equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

    (d) To photograph, sample, and monitor for the purpose of assuring compliance with this permit, or as otherwise authorized by the Clean Water Act.

    [40 CFR 122.41(i]]

12. Monitoring and records.

    (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

STANDARD PROVISIONS FOR NPDES PERMITS (continued)

(b) The Discharger (or Permittee) shall retain records of all monitoring information, including all calibration and maintenance monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Board or EPA at any time.

(c) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;
(ii) The individual(s) who performed the sampling or measurements;
(iii) The date(s) analyses were performed;
(iv) The individual(s) who performed the analyses;
(v) The analytical techniques or methods used; and
(vi) The results of such analyses.

(d) Monitoring must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this permit.

(e) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device, or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

[40 CFR 122.41(j)]

13. All applications, reports, or information submitted to the Board shall be signed and certified in accordance with 40 CFR 122.22 [40 CFR 122.41(k)(l)]

14. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. [40 CFR 122.41(k)(2)]

15. Reporting requirements:

(a) The Discharger (or Permittee) shall give advance notice to the Board, as soon as possible of, any planned physical alterations, or additions to the permitted facility (or project area).

(b) The Discharger (or Permittee) shall give advance notice to the Regional Board of any planned changes in the permitted facility (or project area) or activity that may result in noncompliance with permit requirements.

STANDARD PROVISIONS FOR NPDES PERMITS (continued)

(c) This permit is not transferable to any person, except after notice to the Regional Board. The Board may require modification, or revocation and re-issuance of the permit to change the name of the Discharger (or Permittee), and incorporate such other requirements as may be necessary under the Clean Water Act.

(d) Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(i) Monitoring results must be reported in a Discharge Monitoring Report (DMR).
(ii) If the Discharger (or Permittee) monitors any pollutant more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
(iii) Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

(e) Report of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(f) Twenty-four hour reporting.

(i) The Discharger (or Permittee) shall report any noncompliance that may endanger health or the environment to the Board. Any information shall be provided orally within 24 hours from the time the Discharger (or Permittee) becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Discharger (or Permittee) becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
(ii) The following shall be included as information that must be reported within 24 hours under this paragraph:

(A) Any unanticipated bypass that exceeds any effluent limitation in the permit.
(B) Any upset that exceeds any effluent limitation in the permit.
(C) Violation of a maximum daily discharge limitation for any of the pollutants listed in this permit to be reported within 24 hours.

STANDARD PROVISIONS FOR NPDES PERMITS (continued)

(iii) The Board may waive the above-required written report on a case-by-case basis.

(g) The Discharger (or Permittee) shall report all instances of noncompliance, not otherwise reported under the above paragraphs, at the time monitoring reports are submitted. The reports shall contain all information listed in paragraph 15(f) above.

[40 CFR 122.41(1)]

16. Bypass (the intentional diversion of waste streams from any portion of facility (or project area)) is prohibited. The Board may take enforcement action against the Discharger (or Permittee) for bypass unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.);

(b) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that could occur during normal periods of equipment downtime or preventive maintenance; and

(c) The Discharger (or Permittee) submitted a notice, at least ten days in advance, of the need for a bypass to the appropriate Board.

The Discharger (or Permittee) may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. In such a case, the above bypass conditions are not applicable.

The Discharger (or Permittee) shall submit notice of an unanticipated bypass as required in paragraph 15(f) above.

[40 CFR 122.41(m)]

17. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations because of factors beyond the reasonable control of the Discharger (or Permittee). An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper action. A Discharger (or Permittee) that wishes to establish the affirmative defense of an upset in

STANDARD PROVISIONS FOR NPDES PERMITS (continued)

an action brought for noncompliance shall demonstrate, through signed, contemporaneous operating logs, or other relevant evidence that:

(a) an upset occurred and that the Discharger (or Permittee) can identify the cause(s) of the upset;

(b) the permitted facility (or project area) was being properly operated at the time of the upset;

(c) the Discharger (or Permittee) submitted notice of the upset as required in paragraph 15(f) above; and

(d) the Discharger (or Permittee) complied with any remedial measures required under paragraph 7.

No determination made before an action for noncompliance, such as during administrative review of claims that noncompliance was caused by an upset, is final administrative action subject to judicial review.

In any enforcement proceeding, the Discharger (or Permittee) seeking to establish the occurrence of an upset has the burden of proof.

[40 CFR 122.41(n)]

18. All existing manufacturing, commercial, mining, and silvicultural Discharger (or Permittee)s must notify the Board as soon as they know or have reason to believe:

(a) that any activity has occurred or will occur that would result in the discharge of any toxic pollutant that is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"

(i) One hundred micrograms per liter (100 ug/l);
(ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
(iv) The level established by the Regional Board in accordance with 40 CFR 122.44(f).

(b) that they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant that was not reported in the permit application.

[40 CFR 122.42(a)]

- This paragraph was added or modified by the State Water Quality Control Board to the California Water Code.

Attchd.stdprov.doc

ATTACHMENT "E"

U.S. EPA AMMONIA CRITERIA FOR FRESHWATER

ONE-HOUR AVERAGE CONCENTRATION FOR AMMONIA[1,2]

Waters Designated as COLD, COLD with SPWN, COLD with MIGR (Salmonids or other sensitive coldwater species present)

	Temperature, °C						
pH	0	5	10	15	20	25	30
Un-ionized Ammonia (mg/liter NH_3)							
6.50	0.0091	0.0129	0.0182	0.026	0.036	0.036	0.036
6.75	0.0149	0.021	0.030	0.042	0.059	0.059	0.059
7.00	0.023	0.033	0.046	0.066	0.093	0.093	0.093
7.25	0.034	0.048	0.068	0.095	0.135	0.135	0.135
7.50	0.045	0.064	0.091	0.128	0.181	0.181	0.181
7.75	0.056	0.080	0.113	0.159	0.22	0.22	0.22
8.00	0.065	0.092	0.130	0.184	0.26	0.26	0.26
8.25	0.065	0.092	0.130	0.184	0.26	0.26	0.26
8.50	0.065	0.092	0.130	0.184	0.26	0.26	0.26
8.75	0.065	0.092	0.130	0.184	0.26	0.26	0.26
9.00	0.065	0.092	0.130	0.184	0.26	0.26	0.26
Total Ammonia (mg/liter NH_3)							
6.50	35	33	31	30	29	20	14.3
6.75	32	30	28	27	27	18.6	13.2
7.00	28	26	25	24	23	16.4	11.6
7.25	23	22	20	19.7	19.2	13.4	9.5
7.50	17.4	16.3	15.5	14.9	14.6	10.2	7.3
7.75	12.2	11.4	10.9	10.5	10.3	7.2	5.2
8.00	8.0	7.5	7.1	6.9	6.8	4.8	3.5
8.25	4.5	4.2	4.1	4.0	3.9	2.8	2.1
8.50	2.6	2.4	2.3	2.3	2.3	1.71	1.28
8.75	1.47	1.40	1.37	1.38	1.42	1.07	0.83
9.00	0.86	0.83	0.83	0.86	0.91	0.72	0.58

1 To convert these values to mg/liter N, multiply by 0.822

2 Source: U. S. Environmental Protection Agency. 1986. Quality criteria for water, 1986. EPA 440/5-86-001.

FOUR DAY AVERAGE CONCENTRATION FOR AMMONIA[1,2]

Waters Designated as COLD, COLD with SPWN, COLD with MIGR (Salmonids or other sensitive coldwater species present)

	Temperature, °C						
pH	0	5	10	15	20	25	30
Un-ionized Ammonia (mg/liter NH_3)							
6.50	0.0008	0.0011	0.0016	0.0022	0.0022	0.0022	0.0022
6.75	0.0014	0.0020	0.0028	0.0039	0.0039	0.0039	0.0039
7.00	0.0025	0.0035	0.0049	0.0070	0.0070	0.0070	0.0070
7.25	0.0044	0.0062	0.0088	0.0124	0.0124	0.0124	0.0124
7.50	0.0078	0.0111	0.0156	0.022	0.022	0.022	0.022
7.75	0.0129	0.0182	0.026	0.036	0.036	0.036	0.036
8.00	0.0149	0.021	0.030	0.042	0.042	0.042	0.042
8.25	0.0149	0.021	0.030	0.042	0.042	0.042	0.042
8.50	0.0149	0.021	0.030	0.042	0.042	0.042	0.042
8.75	0.0149	0.021	0.030	0.042	0.042	0.042	0.042
9.00	0.0149	0.021	0.030	0.042	0.042	0.042	0.042
Total Ammonia (mg/liter NH_3)							
6.50	3.0	2.8	2.7	2.5	1.76	1.23	0.87
6.75	3.0	2.8	2.7	2.6	1.76	1.23	0.87
7.00	3.0	2.8	2.7	2.6	1.76	1.23	0.87
7.25	3.0	2.8	2.7	2.6	1.77	1.24	0.88
7.50	3.0	2.8	2.7	2.6	1.78	1.25	0.89
7.75	2.8	2.6	2.5	2.4	1.66	1.17	0.84
8.00	1.82	1.70	1.62	1.57	1.10	0.78	0.56
8.25	1.03	0.97	0.93	0.90	0.64	0.46	0.33
8.50	0.58	0.55	0.53	0.53	0.38	0.28	0.21
8.75	0.34	0.32	0.31	0.31	0.23	0.173	0.135
9.00	0.195	0.189	0.189	0.195	0.148	0.116	0.094

1 To convert these values to mg/liter N, multiply by 0.822.

2 Source: U. S. Environmental Protection Agency. 1992. Revised tables for determining average freshwater ammonia concentrations.

A		B Freshwater		C Saltwater		D Human Health (10^{-6} risk for carcinogens) For consumption of:	
# Compound	CAS Number	Criterion Maximum Conc. [d] B1	Criterion Continuous Conc. [d] B2	Criterion Maximum Conc. [d] C1	Criterion Continuous Conc. [d] C2	Water & Organisms (μg/L) D1	Organisms Only (μg/L) D2
1. Antimony	7440360					14 a,s	4300 a,t
2. Arsenic [b]	7440382	340 i,m,w	150 i,m,w	69 i,m	36 i,m		
3. Beryllium	7440417					n	n
4. Cadmium [b]	7440439	4.3 e,i,m,w,x	2.2 e,i,m,w	42 i,m	9.3 i,m	n	n
5a. Chromium (III)	16065831	550 e,i,m,o	180 e,i,m,o			n	n
5b. Chromium (VI) [b]	18540299	16 i,m,w	11 i,m,w	1100 i,m	50 i,m	n	n
6. Copper [b]	7440508	13 e,i,m,w,x	9.0 e,i,m,w	4.8 i,m	3.1 i,m	1300	
7. Lead [b]	7439921	65 e,i,m	2.5 e,i,m	210 i,m	8.1 i,m	n	n
8. Mercury [b]	7439976	[Reserved]	[Reserved]	[Reserved]	[Reserved]	0.050 a	0.051 a
9. Nickel [b]	7440020	470 e,i,m,w	52 e,i,m,w	74 i,m	8.2 i,m	610 a	4600 a
10. Selenium [b]	7782492	[Reserved] p	5.0 q	290 i,m	71 i,m	n	n
11. Silver [b]	7440224	3.4 e,i,m		1.9 i,m			
12. Thallium	7440280					1.7 a,s	6.3 a,t
13. Zinc [b]	7440666	120 e,i,m,w,x	120 e,i,m,w	90 i,m	81 i,m		
14. Cyanide [b]	57125	22 o	5.2 o	1 r	1 r	700 a	220,000 a,j
15. Asbestos	1332214					7,000,000 fibers/L k,s	
16. 2,3,7,8-TCDD (Dioxin)	1746016					0.000000013 c	0.000000014 c
17. Acrolein	107028					320 s	780 t
18. Acrylonitrile	107131					0.059 a,c,s	0.66 a,c,t
19. Benzene	71432					1.2 a,c	71 a,c
20. Bromoform	75252					4.3 a,c	360 a,c
21. Carbon Tetrachloride	56235					0.25 a,c,s	4.4 a,c,t
22. Chlorobenzene	108907					680 a,s	21,000 a,j,t
23. Chlorodibromomethane	124481					0.401 a,c	34 a,c
24. Chloroethane	75003						
25. 2-Chloroethylvinyl Ether	110758						

26. Chloroform	67663					[Reserved]	[Reserved]
27. Dichlorobromomethane	75274					0.56 a,c	46 a,c
28. 1,1-Dichloroethane	75343						
29. 1,2-Dichloroethane	107062					0.38 a,c,s	99 a,c,t
30. 1,1-Dichloroethylene	75354					0.057 a,c,s	3.2 a,c,t
31. 1,2-Dichloropropane	78875					0.52 a	39 a
32. 1,3-Dichloropropylene	542756					10 a,s	1,700 a,t
33. Ethylbenzene	100414					3,100 a,s	29,000 a,t
34. Methyl Bromide	74839					48 a	4,000 a
35. Methyl Chloride	74873					n	n
36. Methylene Chloride	75092					4.7 a,c	1,600 a,c
37. 1,1,2,2-Tetrachloroethane	79345					0.17 a,c,s	11 a,c,t
38. Tetrachloroethylene	127184					0.8 c,s	8.85 c,t
39. Toluene	108883					6,800 a	200,000 a
40. 1,2-Trans-Dichloroethylene	156605					700 a	140,000 a
41. 1,1,1-Trichloroethane	71556					n	n
42. 1,1,2-Trichloroethane	79005					0.60 a,c,s	42 a,c,t
43. Trichloroethylene	79016					2.7 c,s	81 c,t
44. Vinyl Chloride	75014					2 c,s	525 c,t
45. 2-Chlorophenol	95578					120 a	400 a
46. 2,4-Dichlorophenol	120832					93 a,s	790 a,t
47. 2,4-Dimethylphenol	105679					540 a	2,300 a
48. 2-Methyl-4,6-Dinitrophenol	534521					13.4 s	765 t
49. 2,4-Dinitrophenol	51285					70 a,s	14,000 a,t
50. 2-Nitrophenol	88755						
51. 4-Nitrophenol	100027						
52. 3-Methyl-4-Chlorophenol	59507						
53. Pentachlorophenol	87865	19 f,w	15 f,w	13	7.9	0.28 a,c	8.2 a,c,j
54. Phenol	108952					21,000 a	4,600,000 a,j,t
55. 2,4,6-Trichlorophenol	88062					2.1 a,c	6.5 a,c
56. Acenaphthene	83329					1,200 a	2,700 a
57. Acenaphthylene	208968						
58. Anthracene	120127					9,600 a	110,000 a

59. Benzidine	92875					0.00012 a,c,s	0.00054 a,c,t
60. Benzo(a)Anthracene	56553					0.0044 a,c	0.049 a,c
61. Benzo(a)Pyrene	50328					0.0044 a,c	0.049 a,c
62. Benzo(b)Fluoranthene	205992					0.0044 a,c	0.049 a,c
63. Benzo(ghi)Perylene	191242						
64. Benzo(k)Fluoranthene	207089					0.0044 a,c	0.049 a,c
65. Bis(2-Chloroethoxy)Methane	111911						
66. Bis(2-Chloroethyl)Ether	111444					0.031 a,c,s	1.4 a,c,t
67. Bis(2-Chloroisopropyl)Ether	39638329					1,400 a	170,000 a,t
68. Bis(2-Ethylhexyl)Phthalate	117817					1.8 a,c,s	5.9 a,c,t
69. 4-Bromophenyl Phenyl Ether	101553						
70. Butylbenzyl Phthalate	85687					3,000 a	5,200 a
71. 2-Chloronaphthalene	91587					1,700 a	4,300 a
72. 4-Chlorophenyl Phenyl Ether	7005723						
73. Chrysene	218019					0.0044 a,c	0.049 a,c
74. Dibenzo(a,h)Anthracene	53703					0.0044 a,c	0.049 a,c
75. 1,2 Dichlorobenzene	95501					2,700 a	17,000 a
76. 1,3 Dichlorobenzene	541731					400	2,600
77. 1,4 Dichlorobenzene	106467					400	2,600
78. 3,3'-Dichlorobenzidine	91941					0.04 a,c,s	0.077 a,c,t
79. Diethyl Phthalate	84662					23,000 a,s	120,000 a,t
80. Dimethyl Phthalate	131113					313,000 s	2,900,000 t
81. Di-n-Butyl Phthalate	84742					2,700 a,s	12,000 a,t
82. 2,4-Dinitrotoluene	121142					0.11 c,s	9.1 c,t
83. 2,6-Dinitrotoluene	606202						
84 Di-n-Octyl Phthalate	117840						
85. 1,2-Diphenylhydrazine	122667					0.040 a,c,s	0.54 a,c,t
86. Fluoranthene	206440					300 a	370 a
87. Fluorene	86737					1,300 a	14,000 a
88. Hexachlorobenzene	118741					0.00075 a,c	0.00077 a,c
89. Hexachlorobutadiene	87683					0.44 a,c,s	50 a,c,t
90. Hexachlorocyclopentadiene	77474					240 a,s	17,000 a,j,t
91. Hexachloroethane	67721					1.9 a,c,s	8.9 a,c,t

92. Indeno(1,2,3-cd) Pyrene	193395					0.0044 a,c	0.049 a,c
93. Isophorone	78591					8.4 c,s	600 c,t
94. Naphthalene	91203						
95. Nitrobenzene	98953					17 a,s	1,900 a,j,t
96. N-Nitrosodimethylamine	62759					0.00069 a,c,s	8.1 a,c,t
97. N-Nitrosodi-n-Propylamine	621647					0.005 a	1.4 a
98. N-Nitrosodiphenylamine	86306					5.0 a,c,s	16 a,c,t
99. Phenanthrene	85018						
100. Pyrene	129000					960 a	11,000 a
101. 1,2,4-Trichlorobenzene	120821						
102. Aldrin	309002	3 g		1.3 g		0.00013 a,c	0.00014 a,c
103. alpha-BHC	319846					0.0039 a,c	0.013 a,c
104. beta-BHC	319857					0.014 a,c	0.046 a,c
105. gamma-BHC	58899	0.95 w		0.16 g		0.019 c	0.063 c
106. delta-BHC	319868						
107. Chlordane	57749	2.4 g	0.0043 g	0.09 g	0.004 g	0.00057 a,c	0.00059 a,c
108. 4,4'-DDT	50293	1.1 g	0.001 g	0.13 g	0.001 g	0.00059 a,c	0.00059 a,c
109. 4,4'-DDE	72559					0.00059 a,c	0.00059 a,c
110. 4,4'-DDD	72548					0.00083 a,c	0.00084 a,c
111. Dieldrin	60571	0.24 w	0.056 w	0.71 g	0.0019 g	0.00014 a,c	0.00014 a,c
112. alpha-Endosulfan	959988	0.22 g	0.056 g	0.034 g	0.0087 g	110 a	240 a
113. beta-Endosulfan	33213659	0.22 g	0.056 g	0.034 g	0.0087 g	110 a	240 a
114. Endosulfan Sulfate	1031078					110 a	240 a
115. Endrin	72208	0.086 w	0.036 w	0.037 g	0.0023 g	0.76 a	0.81 a,j
116. Endrin Aldehyde	7421934					0.76 a	0.81 a,j
117. Heptachlor	76448	0.52 g	0.0038 g	0.053 g	0.0036 g	0.00021 a,c	0.00021 a,c
118. Heptachlor Epoxide	1024573	0.52 g	0.0038 g	0.053 g	0.0036 g	0.00010 a,c	0.00011 a,c
119-125. Polychlorinated biphenyls (PCBs)			0.014 u		0.03 u	0.00017 c,v	0.00017 c,v
126. Toxaphene	8001352	0.73	0.0002	0.21	0.0002	0.00073 a,c	0.00075 a,c
Total Number of Criteria [h]		22	21	22	20	92	90

BILLING CODE 6560–50–C

Footnotes to Table in Parargraph (b)(1):

a. Criteria revised to reflect the Agency q1* or RfD, as contained in the Integrated Risk Information System (IRIS) as of October 1, 1996. The fish tissue bioconcentration factor (BCF) from the 1980 documents was retained in each case.

b. Criteria apply to California waters except for those waters subject to objectives in Tables III–2A and III–2B of the San Francisco Regional Water Quality Control Board's (SFRWQCB) 1986 Basin Plan, that were adopted by the SFRWQCB and the State Water Resources Control Board, approved by EPA, and which continue to apply.

c. Criteria are based on carcinogenicity of 10 (-6) risk.

d. Criteria Maximum Concentration (CMC) equals the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects. Criteria Continuous Concentration (CCC) equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects. ug/L equals micrograms per liter.

e. Freshwater aquatic life criteria for metals are expressed as a function of total hardness (mg/L) in the water body. The equations are provided in matrix at paragraph (b)(2) of this section. Values displayed above in the matrix correspond to a total hardness of 100 mg/l.

f. Freshwater aquatic life criteria for pentachlorophenol are expressed as a function of pH, and are calculated as follows: Values displayed above in the matrix correspond to a pH of 7.8. CMC = exp(1.005(pH) − 4.869). CCC = exp(1.005(pH) − 5.134).

g. This criterion is based on 304(a) aquatic life criterion issued in 1980, and was issued in one of the following documents: Aldrin/Dieldrin (EPA 440/5–80–019), Chlordane (EPA 440/5–80–027), DDT (EPA 440/5–80–038), Endosulfan (EPA 440/5–80–046), Endrin (EPA 440/5–80–047), Heptachlor (440/5–80–052), Hexachlorocyclohexane (EPA 440/5–80–054), Silver (EPA 440/5–80–071). The Minimum Data Requirements and derivation procedures were different in the 1980 Guidelines than in the 1985 Guidelines. For example, a ''CMC'' derived using the 1980 Guidelines was derived to be used as an instantaneous maximum. If assessment is to be done using an averaging period, the values given should be divided by 2 to obtain a value that is more comparable to a CMC derived using the 1985 Guidelines.

h. These totals simply sum the criteria in each column. For aquatic life, there are 23 priority toxic pollutants with some type of freshwater or saltwater, acute or chronic criteria. For human health, there are 92 priority toxic pollutants with either ''water + organism'' or ''organism only'' criteria. Note that these totals count chromium as one pollutant even though EPA has developed criteria based on two valence states. In the matrix, EPA has assigned numbers 5a and 5b to the criteria for chromium to reflect the fact that the list of 126 priority pollutants includes only a single listing for chromium.

i. Criteria for these metals are expressed as a function of the water-effect ratio, WER, as defined in paragraph (c) of this section. CMC = column B1 or C1 value x WER; CCC = column B2 or C2 value x WER.

j. No criterion for protection of human health from consumption of aquatic organisms (excluding water) was presented in the 1980 criteria document or in the 1986 Quality Criteria for Water. Nevertheless, sufficient information was presented in the 1980 document to allow a calculation of a criterion, even though the results of such a calculation were not shown in the document.

k. The CWA 304(a) criterion for asbestos is the MCL.

l. [Reserved]

m. These freshwater and saltwater criteria for metals are expressed in terms of the dissolved fraction of the metal in the water column. Criterion values were calculated by using EPA's Clean Water Act 304(a) guidance values (described in the total recoverable fraction) and then applying the conversion factors in § 131.36(b)(1) and (2).

n. EPA is not promulgating human health criteria for these contaminants. However, permit authorities should address these contaminants in NPDES permit actions using the State's existing narrative criteria for toxics.

o. These criteria were promulgated for specific waters in California in the National Toxics Rule (''NTR''), at § 131.36. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays or estuaries and waters of the State defined as inland, i.e., all surface waters of the State not ocean waters. These waters specifically include the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta. This section does not apply instead of the NTR for this criterion.

p. A criterion of 20 ug/l was promulgated for specific waters in California in the NTR and was promulgated in the total recoverable form. The specific waters to which the NTR criterion applies include: Waters of the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of Salt Slough, Mud Slough (north) and the San Joaquin River, Sack Dam to the mouth of the Merced River. This section does not apply instead of the NTR for this criterion. The State of California adopted and EPA approved a site specific criterion for the San Joaquin River, mouth of Merced to Vernalis; therefore, this section does not apply to these waters.

q. This criterion is expressed in the total recoverable form. This criterion was promulgated for specific waters in California in the NTR and was promulgated in the total recoverable form. The specific waters to which the NTR criterion applies include: Waters of the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of Salt Slough, Mud Slough (north) and the San Joaquin River, Sack Dam to Vernalis. This criterion does not apply instead of the NTR for these waters. This criterion applies to additional waters of the United States in the State of California pursuant to 40 CFR 131.38(c). The State of California adopted and EPA approved a site-specific criterion for the Grassland Water District, San Luis National Wildlife Refuge, and the Los Banos State Wildlife Refuge; therefore, this criterion does not apply to these waters.

r. These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays or estuaries including the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta. This section does not apply instead of the NTR for these criteria.

s. These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the Sacramento-San Joaquin Delta and waters of the State defined as inland (*i.e.,* all surface waters of the State not bays or estuaries or ocean) that include a MUN use designation. This section does not apply instead of the NTR for these criteria.

t. These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays and estuaries including San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of the State defined as inland (i.e., all surface waters of the State not bays or estuaries or ocean) without a MUN use designation. This section does not apply instead of the NTR for these criteria.

u. PCBs are a class of chemicals which include aroclors 1242, 1254, 1221, 1232, 1248, 1260, and 1016, CAS numbers 53469219, 11097691, 11104282, 11141165, 12672296, 11096825, and 12674112, respectively. The aquatic life criteria apply to the sum of this set of seven aroclors.

v. This criterion applies to total PCBs, e.g., the sum of all congener or isomer or homolog or aroclor analyses.

w. This criterion has been recalculated pursuant to the 1995 Updates: Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water, Office of Water, EPA–820–B–96–001, September 1996. See also Great Lakes Water Quality Initiative Criteria Documents for the Protection of Aquatic Life in Ambient Water, Office of Water, EPA–80–B–95–004, March 1995.

x. The State of California has adopted and EPA has approved site specific criteria for the Sacramento River (and tributaries) above Hamilton City; therefore, these criteria do not apply to these waters.

General Notes to Table in Paragraph (b)(1)

1. The table in this paragraph (b)(1) lists all of EPA's priority toxic pollutants whether or not criteria guidance are available. Blank spaces indicate the absence of national section 304(a) criteria guidance. Because of variations in chemical nomenclature systems, this listing of toxic pollutants does not duplicate the listing in Appendix A to 40 CFR Part 423–126 Priority Pollutants. EPA has added the Chemical Abstracts Service (CAS) registry numbers, which provide a unique identification for each chemical.

2. The following chemicals have organoleptic-based criteria recommendations that are not included on this chart: zinc, 3-methyl-4-chlorophenol.

ATTACHMENT "G"

SWRCB Minimum Levels in ppb (μg/L)

The Minimum Levels (MLs) in this appendix are for use in reporting and compliance determination purposes in accordance with section 2.4 of this Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the SWRCB and become effective. The following tables (Tables 2a - 2d) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides & PCBs.

Table 2a - VOLATILE SUBSTANCES*	GC	GCMS
1,1 Dichloroethane	0.5	1
1,1 Dichloroethene	0.5	2
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
1,2 Dichlorobenzene (volatile)	0.5	2
1,2 Dichloroethane	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichlorobenzene (volatile)	0.5	2
1,3 Dichloropropene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Bromomethane	1.0	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromo-methane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Chloromethane	0.5	2
Dichlorobromo-methane	0.5	2
Dichloromethane	0.5	2
Ethylbenzene	0.5	2
Tetrachloroethene	0.5	2
Toluene	0.5	2
trans-1,2 Dichloroethylene	0.5	1
Trichloroethene	0.5	2
Vinyl Chloride	0.5	2

*The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
1,2 Benzanthracene	10	5		
1,2 Dichlorobenzene (semivolatile)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatile)	2	1		
1,4 Dichlorobenzene (semivolatile)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3’ Dichlorobenzidine		5		
3,4 Benzofluoranthene		10	10	
4 Chloro-3-methylphenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene(3,4 Benzopyrene)		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene		10	0.1	
Hexachloro-cyclopentadiene	5	5		

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50
Pyrene		10	0.05	

* With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1000, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1000.

** Phenol by colorimetric technique has a factor of 1.

Table 2c – INORGANICS*	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Antimony	10	5	50	0.5	5	0.5			1000
Arsenic		2	10	2	2	1		20	1000
Beryllium	20	0.5	2	0.5	1				1000
Cadmium	10	0.5	10	0.25	0.5				1000
Chromium (total)	50	2	10	0.5	1				1000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1000
Cyanide								5	
Lead	20	5	5	0.5	2				10,000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1000
Selenium		5	10	2	5	1			1000
Silver	10	1	10	0.25	2				1000
Thallium	10	2	10	1	5				1000
Zinc	20		20	1	10				1000

* The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2d - PESTICIDES – PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
a-Hexachloro-cyclohexane	0.01
Aldrin	0.005
b-Endosulfan	0.01
b-Hexachloro-cyclohexane	0.005
Chlordane	0.1
d-Hexachloro-cyclohexane	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Lindane(g-Hexachloro-cyclohexane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

* The normal method-specific factor for these substances is 100, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

Techniques:

GC - Gas Chromatography
GCMS - Gas Chromatography/Mass Spectrometry
HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)
LC - High Pressure Liquid Chromatography
FAA - Flame Atomic Absorption
GFAA - Graphite Furnace Atomic Absorption
HYDRIDE - Gaseous Hydride Atomic Absorption
CVAA - Cold Vapor Atomic Absorption
ICP - Inductively Coupled Plasma
ICPMS - Inductively Coupled Plasma/Mass Spectrometry
SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)
DCP - Direct Current Plasma
COLOR - Colorimetric